

ABSTRACT

Provided are techniques of skin-targeted non-invasive gene delivery to elicit immune responses and uses thereof. Also provided are methods of non-invasive genetic immunization in an animal and/or methods of inducing a systemic immune or therapeutic response in an animal following topical application of vectors, products therefrom and uses for the methods and products therefrom. The methods can include contacting skin of the animal with a vector in an amount effective to induce the systemic immune or therapeutic response in the animal as well as such a method further including disposing the vector in and/or on the delivery device. The vector can be gram negative bacteria, preferably *Escherichia* and most preferably *Escherichia coli*.